



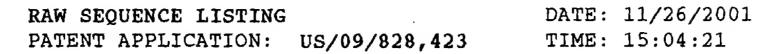
OIPE

DATE: 11/26/2001 RAW SEQUENCE LISTING TIME: 15:04:21 PATENT APPLICATION: US/09/828,423

Input Set : N:\Crf3\RULE60\09828423.txt Output Set: N:\CRF3\11262001\1828423.raw

## SEQUENCE LISTING

```
4 (1) GENERAL INFORMATION:
            (i) APPLICANT: Hillman, Jennifer L.
                            Guegler, Karl J.
                            Patterson, Chandra
            (ii) TITLE OF INVENTION: GROWTH-ASSOCIATED TRYPSIN-TYPE
      8
                                     INHIBITOR HEAVY CHAIN PRECURSOR
C--> 10
           (iii) NUMBER OF SEQUENCES: 5
     11
            (iv) CORRESPONDENCE ADDRESS:
     13
                  (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
     15
                  (B) STREET: 3174 Porter Drive
     16
     17
                  (C) CITY: Palo Alto
                                                               ENTERED
     18
                  (D) STATE: CA
     19
                   (E) COUNTRY: USA
     20
                   (F) ZIP: 94304
              (V) COMPUTER READABLE FORM:
      21
                   (A) MEDIUM TYPE: Diskette
      23
                   (B) COMPUTER: IBM Compatible
      24
                   (C) OPERATING SYSTEM: DOS
      25
                   (D) SOFTWARE: Word Perfect 6.1/MS-DOS 6.2
      26
             (vi) CURRENT APPLICATION DATA:
      27
                   (A) APPLICATION NUMBER: US/09/828,423
      29
                   (B) FILING DATE: 05-Apr-2001
 C-->30
 C-->31
                   (C) CLASSIFICATION:
             (vii) PRIOR APPLICATION DATA:
      32
                    (A) APPLICATION NUMBER: 09/388,774
       34
       35
                    (B) FILING DATE:
            (viii) ATTORNEY/AGENT INFORMATION:
       36
                    (A) NAME: Cerrone, Michael C
       38
                    (B) REGISTRATION NUMBER: 39,132
       39
                    (C) REFERENCE/DOCKET NUMBER: PF-0505 US
       40
              (ix) TELECOMMUNICATION INFORMATION:
       41
                    (A) TELEPHONE: 650-855-0555
       43
                    (B) TELEFAX: 650-845-4166
       44
       45
                     (C) TELEX:
       49 (2) INFORMATION FOR SEQ ID NO: 1:
                (i) SEQUENCE CHARACTERISTICS:
                     (A) LENGTH: 942 amino acids
        51
        52
                     (B) TYPE: amino acid
        53
                     (C) STRANDEDNESS: single
        54
                     (D) TOPOLOGY: linear
        55
              (vii) IMMEDIATE SOURCE:
        57
                     (A) LIBRARY: UTRSNOT02
        58
                     (B) CLONE: 688183
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
        59
        63 Met Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val
                              5
         64
```



Input Set : N:\Crf3\RULE60\09828423.txt
Output Set: N:\CRF3\11262001\I828423.raw

65 66	Gly	Ser	Gln	Glu	Glu 20	Ala	Gln	Ser	Trp	Gly 25	His	Ser	Ser	Glu	Gln 30
	Asp	Gly	Leu	Arg	Val 35	Pro	Arg	Gln	Val	Arg 40	Leu	Leu	Gln	Arg	Leu 45
	Lys	Thr	Lys	Pro	Leu 50	Met	Thr	Glu	Phe	Ser 55	Val	Lys	Ser	Thr	Ile 60
	Ile	Ser	Arg	Tyr	Ala 65	Phe	Thr	Thr	Val	Ser 70	Cys	Arg	Met	Leu	Asn 75
	Arg	Ala	Ser	Glu	Asp 80	Gln	Asp	Ile	Glu	Phe 85	Gln	Met	Gln	Ile	Pro 90
75 76	Ala	Ala	Ala	Phe	Ile 95	Thr	Asn	Phe	Thr	Met 100	Leu	Ile	Gly	Asp	Lys 105
77 78	Val	Tyr	Gln	Gly	Glu 110	Ile	Thr	Glu	Arg	Glu 115	Lys	Lys	Ser	Gly	Asp 120
79 80	Arg	Val	Lys	Glu	Lys 125	Arg	Asn	Lys	Thr	Thr 130	Glu	Glu	Asn	Gly	Glu 135
81 82	Lys	Gly	Thr	Glu	Ile 140	Phe	Arg	Ala	Ser	Ala 145	Val	Ile	Pro	Ser	<b>Lys</b> 150
83 84	Asp	Lys	Ala	Ala	Phe 155	Phe	Leu	Ser	Tyr	Glu 160	Glu	Leu	Leu	Gln	Arg 165
85 86	Arg	Leu	Gly	Lys	Tyr 170	Glu	His	Ser	Ile	Ser 175	Val	Arg	Pro	Gln	Gln 180
87 88	Leu	Ser	Gly	Arg	Leu 185	Ser	Val	Asp	Val	Asn 190	Ile	Leu	Glu	Ser	Ala 195
89 90	Gly	Ile	Ala	Ser	Leu 200	Glu	Val	Leu	Pro	Leu 205	His	Asn	Ser	Arg	Gln 210
92	_	_		Gly	215					220					225
94				Asn	230					235					240
96				Val	245			_		250					255
98	_			Ile	260			_		265					11e 270
100	)			Gln	275	5			-	280	)				285
102	}	_		) Leu	290	)			_	295	5				300
104				Ala	305	5				310	)	-	_		315
106	;			ı Phe	320	)			_	325	5			_	330
108	3			e Ile	335	5			_	340	)		_	_	345
110	)			e Ser	350	)		_		355	5	_	_	_	360
112	}			His	365	5				370	)				375
113	A Ta	тел	ı Glî	n Arg	ATS	1 TTE	arg	i rer	и теп	. AST	n ri As	з тут	val	. Ата	nls

RAW SEQUENCE LISTING DATE: 11/26/2001 PATENT APPLICATION: US/09/828,423 TIME: 15:04:21

Input Set : N:\Crf3\RULE60\09828423.txt
Output Set: N:\CRF3\11262001\I828423.raw

114					380					385					390
115	Ser	Gly	Ile	Gly	Asp	Arg	Ser	Val	Ser	Leu	Ile	Val	Phe	Leu	Thr
116					395					400					405
117	qaA	Gly	Lys	Pro	Thr	Val	Gly	Glu	Thr	His	Thr	Leu	Lys	Ile	Leu
118					410					415					420
119	Asn	Asn	Thr	Arg	Glu	Ala	Ala	Arg	Gly	Gln	Val	Cys	Ile	Phe	Thr
120					425					430					435
121	Ile	Gly	Ile	Gly	Asn	Asp	Val	Asp	Phe	Arg	Leu	Leu	Glu	Lys	Leu
122					440					445					450
123	Ser	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Arg	Arg	Val	His	Glu	Glu	Glu
124					455					460					465
125	Asp	Ala	Gly	Ser	Gln	Leu	Ile	Gly	Phe	Tyr	Asp	Glu	Ile	Arg	Thr
126					470					475					480
127	Pro	Leu	Leu	Ser	Asp	Ile	Arg	Ile	Asp	Tyr	Pro	Pro	Ser	Ser	Val
128					485					490					495
129	Val	Gln	Ala	Thr	Lys	Thr	Leu	Phe	Pro	Asn	Tyr	Phe	Asn	Gly	Ser
130					500					505					510
131	Glu	Ile	Ile	Ile	Ala	Gly	Lys	Leu	Val	Asp	Arg	Lys	Leu	Asp	His
132					515	,				520					525
133	Leu	His	Val	Glu	Val	Thr	Ala	Ser	Asn	Ser	Lys	Lys	Phe	Ile	Ile
134					530					535					540
135	Leu	Lys	Thr	Asp	Val	Pro	Val	Arg	Pro	Gln	Lys	Ala	Gly	Lys	Asp
136		_		_	545					550					555
	Val	Thr	Gly	Ser	Pro	Arg	Pro	Gly	Gly	Asp	Gly	Glu	Gly	Asp	Thr
138			_		560	_		-	_	565					570
139	Asn	His	Ile	Glu	Arg	Leu	Trp	Ser	Tyr	Leu	Thr	Thr	Lys	Glu	Leu
140					575					580					585
141	Leu	Ser	Ser	Trp	Leu	Gln	Ser	Asp	Asp	Glu	Pro	Glu	Lys	Glu	Arg
142					590					595					600
143	Leu	Arg	Gln	Arg	Ala	Gln	Ala	Leu	Ala	Val	Ser	Tyr	Arg	Phe	Leu
144		_			605					610					615
145	Thr	Pro	Phe	Thr	Ser	Met	Lys	Leu	Arg	Gly	Pro	Val	Pro	Arg	Met
146					620					625					630
147	Asp	Gly	Leu	Glu	Glu	Ala	His	Gly	Met	Ser	Ala	Ala	Met	Gly	Pro
148					635					640					645
149	Glu	Pro	Val	Val	Gln	Ser	Val	Arg	Gly	Ala	Gly	Thr	Gln	Pro	Gly
150					650					655					660
151	Pro	Leu	Leu	Lys	Lys	Pro	Tyr	Gln	Pro	Arg	Ile	Lys	Ile	Ser	Lys
152					665					670					675
153	Thr	Ser	Val	Asp	Gly	Asp	Pro	His	Phe	Val	Val	Asp	Phe	Pro	Leu
154				-	680					685					690
155	Ser	Arg	Leu	Thr	Val	Cys	Phe	Asn	Ile	Asp	Gly	Gln	Pro	Gly	Asp
156					695	-				700	_				705
157	Ile	Leu	Arg	Leu	Val	Ser	Asp	His	Arg	Asp	Ser	Gly	Val	Thr	Val
158			-		710		-		<del>-</del>	715		_			720
	Asn	Gly	Glu	Leu	Ile	Gly	Ala	Pro	Ala	Pro	Pro	Asn	Gly	His	Lys
160		_			725	_				730			-		735
161	Lys	Gln	Arg	Thr	Tyr	Leu	Arg	Thr	Ile	Thr	Ile	Leu	Ile	Asn	Lys
162					740					745					750

RAW SEQUENCE LISTING DATE: 11/26/2001 PATENT APPLICATION: US/09/828,423 TIME: 15:04:21

Input Set : N:\Crf3\RULE60\09828423.txt
Output Set: N:\CRF3\11262001\1828423.raw

```
163 Pro Glu Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile Leu
                                                             765
                    755
                                         760
164
165 Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val
                                         775
                    770
166
167 Val Gly Ser Trp Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn
                                                             795
168
                    785
                                         790
169 Val Thr Val Thr Ile Gln Gly Ser Ile Ala Phe Val Ile Leu Ile
                    800
                                         805
                                                             810
170
171 His Leu Tyr Lys Lys Pro Ala Pro Phe Gln Arg His His Leu Gly
                    815
                                         820
172
173 Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser Ser Asn Cys His Gly
                                                             840
                                         835
                    830
174
175 Leu Leu Gly Gln Phe Leu Asn Gln Asp Ala Arg Leu Thr Glu Asp
                    845
                                         850
176
177 Pro Ala Gly Pro Ser Gln Asn Leu Thr His Pro Leu Leu Gln
                                                             870
                                         865
178
                    860
179 Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val Lys Gly His Gln
                    875
                                         880
                                                             885
180
181 Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn Gly Glu Glu
                                         895
                    890
182
183 Gln Ile Asp Cys Trp Phe Ala Arg Asn Asn Ala Ala Lys Leu Ile
                                                             915
                    905
                                         910
184
185 Asp Gly Glu Tyr Lys Asp Tyr Leu Ala Ser His Pro Phe Asp Thr
                                                             930
                                         925
                    920
187 Gly Met Thr Leu Gly Arg Gly Met Ser Arg Glu Leu
                                         940
188
                    935
193 (2) INFORMATION FOR SEQ ID NO: 2:
         (i) SEQUENCE CHARACTERISTICS:
195
196
              (A) LENGTH: 3636 base pairs
197
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: single
198
              (D) TOPOLOGY: linear
199
       (vii) IMMEDIATE SOURCE:
201
202
              (A) LIBRARY: UTRSNOT02
              (B) CLONE: 688183
203
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
205
207 CCCTGAGAGC GTCCCGCAGT GGCTGGAGCC CTGGGCGCTG CAAACGTGTC CCGCCGGGTC 60
208 CCCGAGCGTC CCGCGCCCTC GCCCCGCCAT GCTCCTGCTG CTGGGGCTGT GCCTGGGGCT 120
209 GTCCCTGTGT GTGGGGTCGC AGGAAGAGGC GCAGAGCTGG GGCCACTCTT CGGAGCAGGA 180
210 TGGACTCAGG GTCCCGAGGC AAGTCAGACT GTTGCAGAGG CTGAAAACCA AACCTTTGAT 240
211 GACAGAATTC TCAGTGAAGT CTACCATCAT TTCCCGTTAT GCCTTCACTA CGGTTTCCTG 300
212 CAGAATGCTG AACAGAGCTT CTGAAGACCA GGACATTGAG TTCCAGATGC AGATTCCAGC 360
213 TGCAGCTTTC ATCACCAACT TCACTATGCT TATTGGAGAC AAGGTGTATC AGGGCGAAAT 420
214 TACAGAGAGA GAAAAGAAGA GTGGTGATAG GGTAAAAGAG AAAAGGAATA AAACCACAGA 480
215 AGAAAATGGA GAGAAGGGGA CTGAAATATT CAGAGCTTCT GCAGTGATTC CCAGCAAGGA 540
216 CAAAGCCGCC TTTTTCCTGA GTTATGAGGA GCTTCTGCAG AGGCGCCTGG GCAAGTACGA 600
217 GCACAGCATC AGCGTGCGGC CCCAGCAGCT GTCCGGGAGG CTGAGCGTGG ACGTGAATAT 660
218 CCTGGAGAGC GCGGGCATCG CATCCCTGGA GGTGCTGCCG CTTCACAACA GCAGGCAGAG 720
219 GGGCAGTGGG CGCGGGGAAG ATGATTCTGG GCCTCCCCCA TCTACTGTCA TTAACCAAAA 780
```

RAW SEQUENCE LISTING DATE: 11/26/2001 PATENT APPLICATION: US/09/828,423 TIME: 15:04:21

Input Set : N:\Crf3\RULE60\09828423.txt
Output Set: N:\CRF3\11262001\I828423.raw

220	TGAAACATTT	GCCAACATAA				GGATTGCCCA	
221	GAATGGAATT	TTGGGAGACT	TTATCATTAG	ATATGACGTC	AATAGAGAAC	AGAGCATTGG	900
222	GGACATCCAG	GTTCTAAATG	GCTATTTTGT	GCACTACTTT	GCTCCTAAAG	ACCTTCCTCC	960
223	TTTACCCAAG	AATGTGGTAT	TCGTGCTTGA	CAGCAGTGCT	TCTATGGTGG	GAACCAAACT	1020
224	CCGGCAGACC	AAGGATGCCC	TCTTCACAAT	TCTCCATGAC	CTCCGACCCC	AGGACCGTTT	1080
225	CAGTATCATT	GGATTTTCCA	ACCGGATCAA	AGTATGGAAG	GACCACTTGA	TATCAGTCAC	1140
226	TCCAGACAGC	ATCAGGGATG	GGAAAGTGTA	CATTCACCAT	ATGTCACCCA	CTGGAGGCAC	1200
227	AGACATCAAC	GGGGCCCTGC	AGAGGGCCAT	CAGGCTCCTC	AACAAGTACG	TGGCCCACAG	1260
228	TGGCATTGGA	GACCGGAGCG	TGTCCCTCAT	CGTCTTCCTG	ACGGATGGGA	AGCCCACGGT	1320
229	CGGGGAGACG	CACACCCTCA	AGATCCTCAA	CAACACCCGA	GAGGCCGCCC	GAGGCCAAGT	1380
230	CTGCATCTTC	ACCATTGGCA	TCGGCAACGA	CGTGGACTTC	AGGCTGCTGG	AGAAACTGTC	1440
231	GCTGGAGAAC	TGTGGCCTCA	CACGGCGCGT	GCACGAGGAG	GAGGACGCAG	GCTCGCAGCT	1500
232	CATCGGGTTC	TACGATGAAA	TCAGGACCCC	GCTCCTCTCT	GACATCCGCA	TCGATTATCC	1560
233	CCCCAGCTCA	GTGGTGCAGG	CCACCAAGAC	CCTGTTCCCC	AACTACTTCA	ACGGCTCGGA	1620
234	GATCATCATT	GCGGGGAAGC	TGGTGGACAG	GAAGCTGGAT	CACCTGCACG	TGGAGGTCAC	1680
235	CGCCAGCAAC	AGTAAGAAAT	TCATCATCCT	GAAGACAGAT	GTGCCTGTGC	GGCCTCAGAA	1740
236	GGCAGGGAAA	GATGTCACAG	GAAGCCCCAG	GCCTGGAGGC	GATGGAGAGG	GGGACACCAA	1800
237	CCACATCGAG	CGTCTCTGGA	GCTACCTCAC	CACAAAGGAG	CTGCTGAGCT	CCTGGCTGCA	1860
238	AAGTGACGAT	GAACCGGAGA	AGGAGCGGCT	GCGGCAGCGG	GCCCAGGCCC	TGGCTGTGAG	1920
239	CTACCGCTTC	CTCACTCCCT	TCACCTCCAT	GAAGCTGAGG	GGGCCGGTCC	CACGCATGGA	1980
240	TGGCCTGGAG	GAGGCCCACG	GCATGTCGGC	TGCCATGGGA	CCCGAACCGG	TGGTGCAGAG	2040
241	CGTGCGAGGA	GCTGGCACGC	AGCCAGGGCC	TTTGCTCAAG	AAGCCATACC	AGCCAAGAAT	2100
242	TAAAATCTCT	AAAACATCAG	TGGATGGTGA	TCCCCACTTT	GTTGTGGATT	TCCCCCTGAG	2160
243	CAGACTCACC	GTGTGCTTCA	ACATTGATGG	GCAGCCCGGG	GACATCCTCA	GGCTGGTCTC	2220
244						CCGCCCCTCC	2280
245		AAGAAACAGC					2340
246	AGAGAGATCT	TATCTCGAGA	TCACACCGAG	CAGAGTCATC	TTGGATGGTG	GGGACAGACT	2400
247	GGTGCTCCCC	TGCAACCAGA	GTGTGGTGGT	GGGGAGCTGG	GGGCTGGAGG	TGTCCGTGTC	2460
248	TGCCAACGCC	AATGTCACCG	TCACCATCCA	GGGCTCCATA	GCCTTTGTCA	TCCTCATCCA	2520
249	CCTCTACAAA	AAGCCGGCGC	CCTTCCAGCG	ACACCACCTG	GGTTTCTACA	TTGCCAACAG	2580
250		TCCAGCAACT					2640
251		GACCCTGCAG					2700
252		CCTGAGGCCG				TGGTCTGGAA	2760
253		ATTTACAACG					2820
254	CGCCAAACTG	ATTGACGGGG	AGTACAAGGA	TTACCTGGCA	TCCCATCCAT	TTGACACAGG	2880
255	GATGACACTT				TGGCAGCCTT		2940
256	GTGCATGAAG	GACAGTGATG		GTGGGGCAGC		GCTTGTACAC	3000
257	GCCTCAGCTC	CTGGCAATTA				CATAGATCCG	3060
258	ACGTCTGTCT		TAGGGGTGGG		AAGCCTGAGT		3120
259		CTGCCTCTTC					3180
260		GCTAAATGCA		TATCTTGTCC		TTCTGTTCTG	3240
261	TTAGCATATC	ATAAAGTAAG			TGCTATGAAA	CTTTTTTTCT	3300
262		GGCCAAGTTT		CTTTTTGCCT	TACACTAATG		3360
263	TGTCTTTTCA		AGCCCCCAGA			CAAAGGAATC	3420
264	TCTTGCTGAG				ACATTTGATC		3480
265	ATGAAGTCTT		ACGTTTTTCT		TATCTTGCCC		3540
266		AAAAGAAATT					3600
		AAAAATAAAA					3636
		ATION FOR SI					
•	(-) 7111 01111		_ =	-			

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/828,423

DATE: 11/26/2001 TIME: 15:04:22

Input Set : N:\Crf3\RULE60\09828423.txt Output Set: N:\CRF3\11262001\I828423.raw

L:4 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:] L:10 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:] L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:] L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]